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The Mac Product Experts

## Power Guide: **Mac OS X Hints**



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# Mac OS X Hints

Mac OS X is a complex and powerful operating system, and even those of us who have been using it since its initial release have to admit that we don't know all its secrets yet. Here are some tips and tricks you probably haven't encountered in your everyday use of OS X—they can help you customize your computing experience for greater efficiency and enjoyment.

## The Listless Login Screen

There are two ways of displaying the login panel. The user-friendly way is the list of names, but for greater security (though less convenience), you may prefer to require that would-be Mac users type both their names *and* their passwords into text boxes. This way, would-be evildoers have to know both the cor-

rect spelling of a legitimate account holder's name and the password.

Most people think that getting to this text-box login screen entails opening System Preferences, clicking on Accounts, clicking on Login Options, and turning on Name And Password. The truth is, though, that there's a much quicker way to switch, without even involving System Preferences—it's a trick you might use when, for example, you want to log in as console or root (advanced techies, you know who you are), which requires that you type the name in.

From the list-of-names view, hold down the option and enter keys, and

then click on any name. The login panel switches to displaying the text-entry boxes, where you can log in as root or console.

To switch back to the list view, just click on the Go Back button in the lower left corner of the login panel. (Changing the panel this way is a onetime affair; at the next login, the dialog box will be back to its previous state.)

## The Silence of the Startup Items

What Apple calls a login item is a program, file, folder, or other item that you've designated to open automatically when you log in. If the first thing you do is check your e-mail or a favorite Web page, by all means designate your e-mail program or Web browser as a startup item, so it will be open and ready when you've finished your morning cof-

fee. (You build your list of automatically opening items by dragging their icons into the Login Items panel of System Preferences.)

But sometimes you don't want your regularly scheduled programs to fire at startup. Maybe you're dying to see whether your spouse, boss, or senator responded to your e-mail and you just want to get to your desktop as quickly as possible, without waiting for all your login items to open. Or maybe you've recently installed a program that you think might be causing problems when it autostarts.

In these cases, you'll want to stifle login items, preventing them from opening. To do that, hold down the shift key just after entering your user name and password on the login screen; then press return. You arrive at the desktop, with nothing open but your mind.

## Adding Text to the Login Screen

In case you've been lying awake wondering how to add a line of customized text to your login window, help is at hand. No, really. Maybe you work somewhere that requires a disclaimer on the usage of computing resources. Or maybe you want to add a personal touch to your login window—a daily reminder to floss, for example (see "Login Text"). Adding this line of text entails editing a special preference file—a running theme in the OS X hacking community.

Go to the root of your hard drive and open Library: Preferences. Inside is a file called com.apple.loginwindow.plist. To edit it, drag its icon onto the TextEdit icon (which is in your Applications folder).

The file contains a long list of bracketed words known to programmers as tags. Just below the first `<dict>` tag, insert these two lines:

```
<key>LoginwindowText</key>
<string>Your text goes here</string>
```

Replace *Your text goes here* with whatever you'd like displayed in the login window. (The text is left-justified. If you want it to appear centered, you'll have to type a bunch of spaces in front of it.)



### Tipping the Scales

This article is an excerpt from *Mac OS X Hints, Jaguar Edition* (O'Reilly, 2003), by Rob Griffiths. You can find the book at [www.oreilly.com](http://www.oreilly.com) or at your local bookstore.

Choose File: Save. When TextEdit tells you it can't save the document, click on Overwrite. The next time you log in, you'll savor the results of your modification.

## Changing the Alert Volume

As far as your speaker volume is concerned, there are two categories of sound in OS X: alert beeps (noises that you hear when your system does something it's proud of, such as receiving an e-mail, or concerned about, such as crashing a program) and overall volume (the sound level for playing CDs, MP3s, and Doom). The volume control in your menu bar (which you can turn on in the Sound panel of System Preferences) changes the overall system volume. But if you drag the slider while holding the option key, you change only the alert volume.

## The Volume-Changing Click

When you increase or decrease the volume on your OS X machine via the keyboard, you hear a muted clicking noise to help you gauge the new level as you set it (unless you've turned off this feature in the Sound preferences panel). If you want a longer or less coworker-friendly noise, you can change this click to anything you'd like. All you need is a standard sound file in AIFF format—a Bart Simpson snippet, a rude noise from the Internet, or whatever.

Then proceed like this:

1. Open System: Library: LoginPlugins: BezelServices.loginPlugin: Contents. Your job is to replace the standard sound file within Contents: Resources—but you'll be thwarted by the highly skeptical attitude that OS X takes toward people who try to fool around with it. In short, you're not allowed to change anything in the System folder. But you, intrepid hacker, don't care about that. As long as you have an administrator account, you can change whatever you like just by telling the system software that the owner of the Resources folder is *you*, not it.
2. Highlight the Resources folder, and then choose File: Get Info. The Info window will appear.
3. Expand the Ownership & Permissions triangle. If you see a locked-padlock icon, click on it. OS X will ask you to prove your administrator status by entering your account name and password; then click on OK.
4. From the Owner pop-up menu, choose your account name, which is designated by the cute suffix (*Me*). You've just told OS X that *you* are the rightful owner of the Resources folder, and that therefore you're allowed to make any changes you like—such as replacing the volume-click sound. Leave the Get Info window open for now.
5. Within the Resources window, highlight the file called volume.aiff. Choose File: Duplicate. You've



**Login Text** By editing one simple preference, you can add text to the login window. Here, we inserted spaces to center the text.

just created a backup, in case you decide to restore the original volume-click sound.

6. Delete the volume.aiff file. Drag your replacement sound into the window, and rename it so that it is now called volume.aiff.

7. Finally, you'll want to return the ownership of the Resources folder to OS X. In the Get Info window, choose System from the Owner pop-up menu. Close the Get Info window. The next time you log in and tap the volume keys to adjust your speakers, you'll hear your new volume-click sound—for better or for worse.

## Insta-Closing Multiple Windows

When you find yourself with several open windows in one program, especially in the Finder, don't waste time trying to close them individually. Instead, option-click on the red close button at the top left of any open window. Presto: All windows close simultaneously (except in Word v. X—Microsoft marches to a different drummer).

## Scrolling Diagonally

At first glance, you might assume that scroll bars are an extremely inefficient mechanism when you want to scroll a window diagonally—and you'd be right. Fortunately, OS X includes an alternative scrolling system for such situations. Position your mouse inside a Finder icon- or list-view window; while pressing ⌘-option, you can drag—and scroll—in any direction, thanks to the little white-gloved hand cursor that appears at your command.

## Adding an Eject Icon

The prescribed way to eject a CD or DVD is to press the eject (or F12) key on your keyboard. That's not much help if you have a non-Apple keyboard, if you have more than one drive capable of ejecting, or if, in a fit of troubleshooting, you find yourself without a

continues



If anything went wrong—if you inadvertently chose a full-length sound file of Wagner's *Ring* cycle as the

volume-click sound, for example—repeat these steps, but remove your “bad” new sound and rename the backed-up original to return the folder to its premodification state.

keyboard altogether. Fortunately, there's a secret way to do the same thing: install the Eject menulet.

To find the installer, go to the root of your hard drive and open System: Library: CoreServices: Menu Extras. Inside that window, double-click on the icon called Eject.menu.

Now look at your menu bar, and you'll find the new Eject icon. Use it as a menu and choose the drive you'd like to eject.

## Window Backgrounds

In icon view, you can use images or colors as the backgrounds for Finder windows. This option sounds like nothing more than eye candy. But it actually has a very practical *raison d'être*. If you color-code your windows, you know which folders are open on your desktop without even looking for their title bars. The windows also differentiate themselves when minimized in the Dock (see "Finder Pics").

For a more dramatic effect, give your hot-projects folder a light-red background. Give less-important stuff—lists of all the airline silverware you've ever stolen, or your screenplay-in-progress about a team

of dachshund puppies who break an international weapons-smuggling ring—a light-blue background. Light green could signify your personal-finances folder. And an image of your favorite lawn ornament could be the background for your pictures folder.

To change the background color of a Finder window, follow these steps.

1. Make sure the window is in icon view, and then choose View: Show View Options. If you want to apply a color or picture to only one folder, select This Window Only at the top of the dialog box.
2. At the bottom of the box, choose either Color or Picture. Color brings up a little frame; when you click on it, the Colors dialog box appears. Click anywhere in the Color Wheel to select a tint, or play with the display options at the top of the box (Color Sliders, Color Palettes, Image Palettes, and Crayons). If you choose Picture, click on Select to open a dialog box you can navigate through to pick an image.

As you work, remember that low-contrast or light background colors and photos work best for legibility. Furthermore, if you decide to choose a photographic background, keep in mind that the Mac has no idea what sizes and shapes your window may assume in its lifetime. Therefore, OS X makes no attempt to scale down a selected photo to fit neatly into the window. If you have a high-res digital camera, you may see only the upper left corner of a photo as the window background. Use a graphics program to scale the picture down to something smaller than your screen resolution for better results.

## Adding Quit to the Finder Menu

The Finder may start up automatically each time you log in, but behind the scenes, it's nothing more

than a standard OS X program. It may not appear to have a Quit command, but you can indeed quit the Finder when you need just a little bit more memory or computer horsepower for, say, some 3-D-graphical battle simulator.

There are a number of different ways to quit the Finder—force-quitting, for example. But if you find yourself wanting to quit the Finder with any regularity, the simplest way is to add a Quit menu item at the bottom of the Finder menu (see "Finder Quit"). Here's how to go about it:

Open Terminal and then type `defaults write com.apple.finder QuitMenuItem -bool yes`. Press Enter and restart the Finder. Now, lo and behold, you can press `⌘-Q` (or choose Finder: Quit Finder) whenever you want to quit the Finder. When you need the Finder back, a simple click on its Dock icon revives it.


## Canceling a Drag and Drop

Suppose you're dragging an icon across the screen—and halfway through the operation, you decide you don't want to drop it. You could, of course, mouse back and drop where you started.

But life is too short. It's much easier to press the escape key (in the upper left corner of your keyboard) while dragging and then release the mouse button. A shrinking rectangle shows you the icon returning to its original location, no harm done.

## Creating an Alias of Your Home Folder

For quick access, you might want to add an alias of your Home folder to another folder—or lots of other folders. Alas, when your Home folder is highlighted, the File: Make Alias option is grayed out.



**TIP**

This workaround lets you create aliases of any folder that does not allow alias creation via the menu.

The solution is to `⌘-option-` drag your Home folder out of its window: presto—an alias is born.

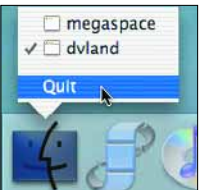
## The Permanence of Server Icons

If you're a network maven who regularly connects to a couple of servers, consider dragging the servers' icons onto the toolbar for easy access. In fact, you can set the servers to log you in automatically, so a single click connects you. Here's how to go about it:

1. In the Finder, press `⌘-K`. The Connect To Server dialog box appears. If your network is working properly, you'll see a list of the other computers on it at the left side of the window.
2. Select the server you want, and then click on Connect. A new window will open.
3. Enter your user name and password. This is the name and password that were set up for your

continues

**Finder Pics**  
Different colors can help you distinguish between minimized Finder windows in the Dock.



**Finder Quit** You can quit the Finder as you can any other program. To remove the Quit menu item, repeat the Terminal command described in this hint, but replace `yes` with `no`.

account on the other machine—the one you’re connecting to.

4. Click on Options—this is the key move.

5. In the Options box, turn on Add Password To Keychain, and then click on OK. You return to the Connect To Server dialog box, having just told OS X to memorize your password so that you’ll never have to type it again.

6. Click on Connect. The icon of the other computer’s shared disk or folder—the server—now shows up on your desktop.

7. Drag the server’s icon from the desktop to the toolbar. From now on, when you want to connect to another machine, just

click on that icon. One click does the trick—OS X remembers your name and password.



**TIP**

Whenever a server isn’t online, its icon appears as a question mark.

### Unused Languages: Free Your Megabytes

Many OS X programs let you work in a number of languages. iPhoto, for example, supports more than ten languages, which contribute to its taking up a whopping 60MB or more of your hard drive.

You can recover some of that real estate by deleting the languages you don’t need. You can slim

down iPhoto, for example, to just under 13MB by deleting everything but English. Not bad for two minutes’ worth of work.

Note that this operation involves removing files from

inside a software package. If you’re worried about damaging the program you’re going to alter, create a backup copy of it (option-drag the application to another spot on your hard drive).

1. Control-click on a program’s icon. From the contextual menu, choose Show Package Contents. Many OS X program icons are, in fact, thinly disguised folders—and this is how you get into them.

2. Open Contents: Resources. You’ll probably see a lot of files inside this folder. You’re interested in folders that end in .lproj, such as da.lproj and Dutch.lproj. These are the OS X language files.

3. Throw away the files for the languages you don’t speak. Close all the open windows. To make sure you’ve left the application healthy, double-click on it once before emptying the Trash. If for some reason the application won’t run (if you dragged out something more than just .lproj files, for example), open your Trash and drag all the files you’ve removed back into Contents: Resources to restore the program (or just reinstate the backup you made).

### Changing the Screen behind the Login Window

Behind the initial login screen, the background image is blue with some white arcs running through it in a semicircular pattern. It’s very pretty—the first 4,000 times you have to look at it. If you’d like to express your creativity by replacing this background

with something groovier and more personal, you can use this technique:

1. Choose an image you’d like to use. Any JPEG or PDF file is fine.

2. From the root of your hard drive, open Library: Desktop Pictures. A list of the standard Apple desktop images appears. Aqua Blue.jpg is the file you want to replace. Drag it out of the folder to a safe place as a backup (or just rename it).

3. Drag your own graphic into the Desktop Pictures folder. Rename your file Aqua Blue.jpg. This sleight of hand allows the system to find it during the boot process.

4. Restart the machine, and your new image appears behind your login screen.

### Storing Apple Software Updates

Software Update is Apple’s way of cleaning up after itself. A dialog box appears from time to time, offering to install patches and updates that Apple has just released.

Unfortunately, if you ever reinstall OS X from its original CD or DVD (when you install a new hard drive or move to a new Mac, for example), you’ll have to download and install all relevant updates again. You can’t skip the reinstallation process, but you can skip the download step.

Preserving these updates on your hard drive is easy enough. Each time Software Update finds updates to install, select the update(s) you wish to install and then choose Update: Download Checked Items To Desktop (see “Software-Update Download”).

Later, you can reinstall your downloaded updaters at any time by double-clicking on each installer.

### Deleting Orphaned Servers

You summon the Connect To Server dialog box in the Finder by choosing Go: Connect To Server (or pressing ⌘-K). Once the box appears, the pop-up menu at the top of the dialog box displays a list of servers you’ve recently used. The trouble is that when the computers to which you connect move, get renamed, or disappear, the list provides no way to remove the dead items. The solution is to open Home: Library: Recent Servers. Inside, you

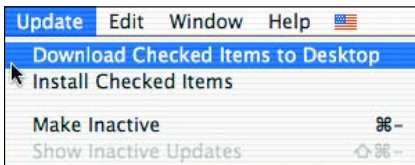
will find the icons of the servers listed in the Recent Servers pop-up menu. Just delete the icons for the servers you don’t want to see on the list. □



**TIP**

You can also use the Recent Servers folder to create a Dock shortcut. Just drag the folder’s icon onto the

Dock, and you’ve got pop-up access to your recently visited servers.



#### Software-Update

**Download** When you download software updates from Apple, use this menu command to save a copy of each update on your hard drive. If you’ve created a folder for downloads, move the downloads there.



## Mac OS X Hints

THIS MONTH, LEARN SHORTCUTS, HINTS, AND UNIX TIPS for deleting iTunes playlists, building quick image galleries, turning off Mail's junk-mail sounds, changing Terminal's calendar language, installing

system updates remotely, blocking access to certain Web sites, restoring a lost Purchased Music playlist in iTunes, and more.

### Delete an iTunes Playlist without Warning

When you try to delete a playlist in iTunes, you're greeted by a confirmation dialog box asking, "Are you sure you want to delete the playlist '*name*'?" You could permanently remove this dialog box by selecting the Do Not Ask Me Again option, but this is a pain to undo later.

A better solution is to leave the warning dialog box enabled, but bypass it when you're positive you want to delete a playlist. Just press ⌘-delete with the chosen playlist highlighted. iTunes will then delete the playlist without any warning.

### Toggle Audio and MP3 CD Burning in iTunes

iTunes lets you burn either standard audio CDs or MP3 CDs, which many newer car and home CD players can play. Normally, toggling between the two burning modes requires opening iTunes' preferences, clicking on the Burning button, choosing the desired disc format, and then clicking on OK.

A much simpler solution is to leave your preferences set for audio-CD burning, and let iTunes' intelligence do the work for you. Just select more than 80

minutes' worth of music (the maximum amount for a blank 700MB CD), and iTunes will display a dialog box warning that the chosen songs will not fit on a standard audio CD, and offering instead to burn a data CD. Click on the Data CD button, and you'll soon have all the MP3s on your CD. Note that not all players can handle data CDs, so test one before you create a dozen party-tunes collections for your next event.

### Build a Quick HTML Image Gallery

iPhoto is a great tool for building image galleries. But you may want to create a gallery from images that aren't stored in iPhoto—for example, a collection of images received via e-mail. If you just need a quick and simple gallery, you can use an AppleScript included in OS X to get the job done.

From the root level of your hard drive, open Library: Image Capture: Scripts. These scripts are designed to be used with the Image Capture application, but they'll also work fine on their own. Drag a folder of images onto the Build Web Page script. When it's done, the script will open your preferred browser and load the image gallery. Your image folder will now contain your original, unaltered photos, as well as your HTML gallery in an Index folder.

### Silence Mail's Junk-Mail Sounds

Tired of hearing Mail's new-mail alert, only to find that your new message is yet another request for help in transferring \$20 million from a Nigerian bank? To eliminate these false alarms, start by opening Mail's preferences, clicking on the Accounts tab, and then setting the New Mail Sound menu to None. Click on the Rules tab and then click on the Add Rule button. Set the If section to Any, and the pop-up menu underneath to Every Message. In the Perform The Following Actions section, choose Play Sound, and then choose your favorite sound effect (to learn how to add your own sounds, see "Give Mail Its Own Voice"). Click on OK to save the new rule.

Now move your new rule so it's just below all your junk-mail rules (move these to the top of the list if necessary). Select the first junk-mail rule and click on Edit; then click on the last plus sign (+) in the Perform The Following Actions section to add a new action at the end of the list. Select Stop Evaluating

## UNIX TIP OF THE MONTH

One of the more interesting features in Unix is the ability to create your own commands through things called aliases. They're not related to the aliases you might create in the Finder; instead, they're a way to make a shortcut for something you do regularly in Terminal. For example, if you work with the built-in Web server, you may find yourself opening Terminal and typing `cd /Library/WebServer/Documents` to change to the Web server's file directory. With an alias, you can shorten that to simply `webfiles` or even `wf` if you prefer.

Open Terminal and type `pico .tcshrc`. Pico is a text editor, and `.tcshrc` is a special configuration file that can store aliases (among other things). Now type `alias wf 'cd /Library/WebServer/Documents'` on an empty line if there are other lines in the file already. Press control-O and return to save the file. Press control-X to quit pico, and type `source .tcshrc` to read your newly updated file; then type `wf`.

Similarly, to make your changes from "Translate Terminal's Calendar Language" permanent, add the alias line from that hint to the `.tcshrc` file and save it as described above.

Rules in the pop-up menu, and then click on OK to save your changes. Repeat for each junk-mail rule you have. Now you'll no longer hear the new-mail sound for every piece of spam you receive.

### Translate Terminal's Calendar Language

In Terminal, the Unix command `cal` will display a monthly calendar. But if your native language isn't English, you may not like its English-only date headings. To switch the headings to another language (in this example, French), enter the following in Terminal (note that there are two spaces between S and M, Tu and W, Th and F, and F and S):

```
alias cal "cal | sed 's/S M Tu W Th F S/Di Lu Ma Me Je Ve Sa/'"
```

Now the `cal` command will run your alias instead, and substitute your replacements for the stock day names. To make this change stick after you close your window, however, you'll have to add the alias to one of the invisible Unix files in OS X, the `.tcshrc` file at the root of your user folder (for more on this, see "Unix Tip of the Month").

### Install System Updates from Afar

Ever been at work when Apple released a big software update and wished you could start the update at home right away? If you have a full-time Internet connection and you've set up your Mac for remote access, you can. Just connect to your home Mac via a command-line interface and type:

```
sudo softwareupdate
```

Software Update will run and let you know if it finds any new updates. If it does, you'll see the update name and description. To install the update, just type:

```
sudo softwareupdate update name
```

Software Update will then start downloading and installing the selected update while you finish your day at the office.

### Block Certain Web Sites

Have a project that absolutely must be done today, and don't have time for your daily Slashdot fix? Or don't want the kids to be able to visit a certain page? Open Terminal and type:

```
sudo sh -c 'echo "127.0.0.1 slashdot.org" >> /etc/hosts'
```

Reboot your machine, and all attempts to view your favorite OS X hints site will result in your browser's loading your local machine's Web pages instead. When you want to undo your restrictions, type:

```
sudo pico /etc/hosts
```

Delete the line you added (127.0.0.1 slashdot.org in this example), and then press control-O to save the file and control-X to exit. Once you reboot, all will be back to normal.

## GIVE MAIL ITS OWN VOICE

Tired of the boring new-mail alert sounds? With a bit of help from AT&T's Natural Voices demo site ([www.naturalvoices.att.com/demos/](http://www.naturalvoices.att.com/demos/)), you can create your own customized e-mail announcements. Load the site, choose a language and voice from the pop-up menus, set the output format to Aiff (Mac), change the sample rate to 22kHz, enter your text, and click on the Go button (as shown in "Speak, Mail, Speak"). Once the sound has played, select File: Save As and save the file.

In Mail, edit the rule you created in "Silence Mail's Junk-Mail Sounds": Select Add/Remove from the pop-up menu of sounds. Click on the Add button, navigate to your new sound file, highlight it, and click on Open. Click on Done and then find

your sound in the pop-up menu. Choose it and click on OK; future e-mails will be announced by your customized audio.

The screenshot shows the Natural Voices demo site interface. At the top, there are flags for U.S. English, Latin American Spanish, German, Parisian French, and U.K. English. Below this, there are two tabs: "Interactive" (selected) and "Recorded". Under "Interactive", there are two sections: "Select a Language" with a dropdown menu set to "U.K. English", and "Select a Voice" with a dropdown menu set to "Audrey". Below these, there is a section for "Select an Output Format" with radio buttons for "wav (PC)", "aiff (mac)" (selected), and "au". Below that, there is a "NOTE: Current selection is preset for your PC". Then, there is a "Select a Sample Rate" section with radio buttons for "22KHz" (selected), "16KHz", "11KHz", and "8KHz". At the bottom, there is a text box with the text "Sir, the mail is here." and a "GO" button. Above the text box, there is a note: "Enter one or more words of text and click SUBMIT to hear the Text-to-Speech conversion (limit 30 words):".

### Speak, Mail, Speak

If you find a simple sound effect too boring for new-mail alerts, how about a posh British voice instead?

### Restore iTunes' Purchased Music Playlist

Purchases made at the iTunes Music Store show up in a special playlist called Purchased Music. This playlist helps you keep track of your Music Store purchases, but it's just like any other playlist—so it can be deleted. Once it's deleted, there's no way to get it back.

Though iTunes will create a new Purchased Music playlist with your next purchase, it won't include any past music you've bought. You can, however, make a perfect substitute with iTunes 4's Smart Playlist feature. Select File: New Smart Playlist, and set the options as shown in "Smart Purchases." Click on OK when you're done, and name your playlist something memorable (say, My Purchased Songs). All past and future purchases will now be a part of this playlist. □

### Smart Purchases

Use the Smart Playlist feature to re-create the default iTunes playlist that tracks your iTunes Music Store purchases.

The screenshot shows the iTunes Smart Playlist dialog box. At the top, it says "Smart Playlist". Below that, there is a checkbox labeled "Match the following condition:" which is checked. Below this, there is a row of three dropdown menus: "Kind", "is", and "Protected AAC audio file". Below this, there is a row of three checkboxes: "Limit to", "25", and "songs". Below this, there is a row of three checkboxes: "Match only checked songs", "selected by", and "random". Below this, there is a checkbox labeled "Live updating" which is checked. At the bottom right, there are two buttons: "Cancel" and "OK".

ROB GRIFFITHS is the author of *Mac OS X Hints, Jaguar Edition* (O'Reilly, 2003) and runs the Mac OS X Hints Web site ([www.macosxhints.com](http://www.macosxhints.com)).

## Mac OS X Hints

TAKE A LOOK AT SOME WAYS TO SEE MORE IN FINDER windows, tweak your iChat messages so they contain multiple lines, print pages to PDF, assign multiple genres to iTunes tracks, know how much is in your Trash, take advantage of Unix's redirection command, train Mail only once, and more.

### Enhance Your Column View

If you'd like to see more data in Finder windows, open a window in Column view and then type `⌘-J`, or select View: Show View Options. At the top of the window, select the Windows option, and pick an 11- or 10-point size instead of the default 12-point. Unlike List and Icon views, Column view reduces the size of icons when you choose a smaller font. A simple one-point reduction in font size lets you see many more items at once, with almost no loss in readability—ideal for monitors with lower resolutions.

### Create an iChat Message That Spans Multiple Lines

If you ever want to send a multiline message to someone in iChat AV, just hold down the option key before you press return. You can now type multiple unique lines, pressing option and return simultaneously each time. The message won't be sent until you press just the return key.

### View Album Art for the Current iTunes Track

For some reason, the default iTunes setting for displaying album covers is to show the artwork for the selected song, not the currently playing song. But you can eliminate this frustration. If you just click on the Selected Song title bar at the top of the cover-artwork



**Play Time** By default, iTunes shows cover art for your selected song (left). Click on the Selected Song title bar, though, and you'll get the much more relevant Now Playing artwork window.

box, it will change to read Now Playing. Now, iTunes will display the artwork associated with the current song for good—unless you click on the Now Playing title bar to change it (see “Play Time”).

## UNIX TIP OF THE MONTH

When you're in OS X's command line, you may find the Unix redirection feature useful. Redirection is nothing more than taking the output of a program and sending it to somewhere other than its default location. For instance, if you'd like to save a full directory listing (created with `ls -al`) into a text file, you have two choices. The typical Mac solution is to select the on-screen output, copy it, switch to a word processor, paste the contents, and save the file. The Unix redirection solution is much simpler. Just type `ls -al > dirlist.txt`, where `dirlist.txt` is any file name you want to use. The `>` symbol redirects the output of `ls` from its usual destination (the screen) to the specified file. This will create a new file or overwrite an existing file with the same name. If you have an existing file to which you'd like to add more data, replace the `>` with `>>`.

In addition to directory-list files, you can use redirection to create a list of all the MP3s in a certain directory (`find ~/Music/ -iname "*.mp3" -print > mytunes.txt`) or a running log of your machine's uptime and CPU load (`uptime >> myuptime.txt`), or to capture the output of any other Unix command.

### Print Pages to PDF

One of OS X's oft-overlooked features is its ability to turn any on-screen element into a PDF file, through the Print dialog box. Select File: Print from any application, and click on the Save As PDF button to create the file. This maneuver is perfect for sending a FileMaker Pro report to a colleague, saving online Web-store receipts, or creating a document that you can send to people on multiple platforms with the knowledge that they'll all be able to open, view, and print it. This feature is even great for browsing Web sites—when you find a tidbit of knowledge you'd like to retain, just save it as a PDF file on your hard drive, and it will be instantly available when you need it.

### Prevent Safari from Autocompleting

Safari, like many other browsers, tries to help by autocompleting URLs as you type them, basing its



## SHARE MAIL'S JUNK RULES

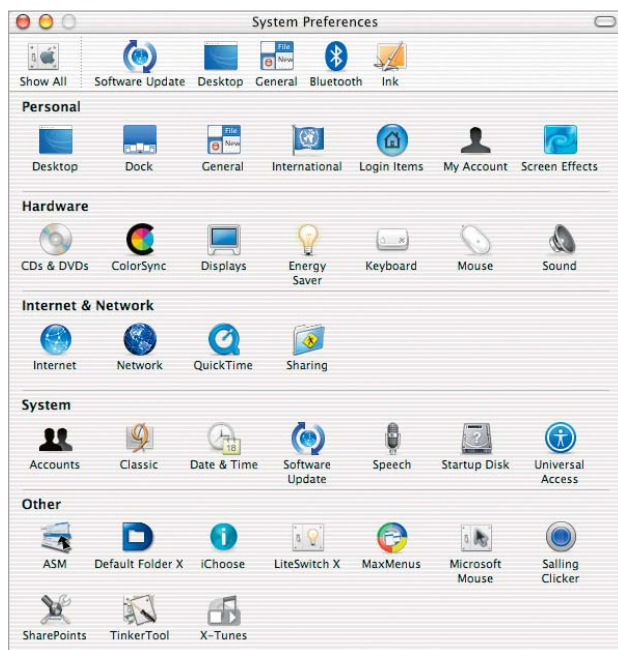
Apple's Mail application has a great junk-mail filter. To get the most out of it, though, you'll have to spend a few months training it to distinguish your good e-mail from your junk e-mail. If you have multiple machines, or multiple users on the same Mac, you don't have to let all that work go to waste. In your user folder, open the Library: Mail folder and copy LSMMAP to the same location in the other users' folders (or onto another machine entirely). Now when you run Mail as the other user, you'll have the benefit of all those months of training.

choices on your prior viewing habits. While this is useful most of the time, it's frustrating when you want to load a site's home page and Safari takes you to the subpage you last viewed. If you'd like to limit these autocompletions, start by choosing History: Clear History, and then quitting Safari. In your user folder, go to Library: Safari and locate the history.plist file. Select the file, choose File: Get Info, and then click on the Locked option. Now close the window.

When you relaunch Safari, autocompletion will still work as expected on bookmarks, and it will also work for URLs you visit in the current session. But the next time you quit and restart Safari, the autocompletion data will vanish—it can't be written to the locked .plist file. To return to normal autocompletion, deselect the Locked option in the history.plist file's Get Info dialog box.

### Display All Your Preference Panels

In System Preferences, certain preference panels, such as Bluetooth and Ink, display only when the



**Choose Your Own Prefs** You can have access to the Bluetooth and Ink icons in the toolbar even though they aren't listed in the Hardware section, as they would be if the devices were attached.

applicable hardware is available. To access these panels at any time, just drag them into the System Preferences toolbar (see "Choose Your Own Prefs"). Once they are on the toolbar, you click on their respective icons to load the panels, even if you don't have the proper hardware attached.

### Zip Through iTunes Songs via the Keyboard

Want to use your keyboard to fast-forward or rewind a song in iTunes? With iTunes as the active application, press and hold down both the ⌘ key and the option key; then press and hold the left- or right-arrow keys to rewind or fast-forward, respectively. This little trick saves you time and mouse movements.

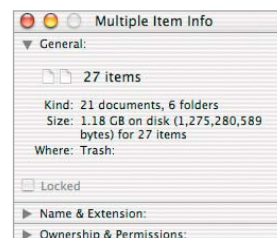
### Pick Multiple Genres for iTunes Songs

iTunes 4 lets you place a song into any genre for easy sorting and searching. But did you know that you can assign multiple genres to a single song? Highlight a song in your iTunes library, and then select File: Get Info. In the dialog box that appears, click on the Info tab and type your genres, separated by commas (Rock, Pop, for example), in the Genre box, and then click on OK. A future search or Smart Playlist for a particular genre will now show all songs with that genre in the Genre box. (Note that this will not work when using iTunes to browse by genre.)

### How Big Is the Trash?

One OS 9 feature missing from OS X is the ability to easily see how many files are in the Trash, as well as the total amount of disk space they use. But this information is useful when you want to perform a quick safety check. If your Trash contains 38.6GB of data, you probably want to verify that you didn't accidentally drag your iTunes Library into the Trash.

An easy way to get this information in OS X is to open the Trash by clicking on its Dock icon, type ⌘-A to select everything in it, and then type ⌘-I to open the Get Info window. The Get Info window will reveal the number, type, and size of the items in your Trash (see "Garbage Bag"). If the file count and size match what you expect, then go ahead and empty the Trash. If they don't, maybe you should dig in the Trash for some buried treasure. □



### Garbage Bag

In OS X, you can reveal the number and size of items in your Trash by opening the Trash, selecting all, and getting information on the files.

ROB GRIFFITHS is the author of *Mac OS X Hints, Jaguar Edition* (O'Reilly, 2003) and runs the Mac OS X Hints Web site ([www.macosxhints.com](http://www.macosxhints.com)).



Mac OS X Hints offers tips and tricks for using hidden features in OS X. We want to hear from you! If you've got suggestions for column topics or want to tell us what you think of *Mac OS X Hints*, e-mail us at [macosxhints@macworld.com](mailto:macosxhints@macworld.com). For more hints, go to [www.macosxhints.com](http://www.macosxhints.com).

# Mac OS X Hints

DISPLAY FULL FILE PATHS IN SEARCH RESULTS, SEARCH more quickly for software updates, have some fun with Pong, make hidden apps *look* hidden in the Dock, see who's accessing your Mac, and more.

## Make Hidden Apps Look Hidden

The easiest way to hide an application's windows is to press `⌘-H`. But when you do this, the hidden application's Dock icon doesn't change—which may lead you to accidentally activate the hidden windows by clicking on the application's icon. With one simple Terminal command, you can command the Dock to differentiate between hidden and nonhidden apps (see “Hide and Seek”). Just open a new Terminal window, type the following, and then press enter: `defaults write com.apple.Dock showhidden -bool yes`.

Although you've told the Dock to give your hidden applications a unique look, you won't see the effect until you restart the Dock. Launch Process Viewer in 10.2 or Activity Monitor in 10.3 (both in Applica-

tions: Utilities), find and click on the Dock entry, and then select Process: Quit to restart the Dock. From now on, any application you hide will have a semi-transparent icon. To get things back to normal, just repeat the above command with `no` at the end, and then restart the Dock.

## Take Ink's Font for a Spin

Are you addicted to fonts? Always looking to add another freebie to your collection? In OS X, Apple includes a font called Apple Casual for use with the Ink handwriting-recognition system. But even if you don't have an input pad, you can benefit from the Apple Casual font.

In the Finder, go to System: Library: Components: Ink.component: Contents: SharedSupport. Control-click on InkServer and select Show Package Contents; then go to Contents: Resources. The first item in the list will be AppleCasual.dfont. Open your user folder in a new Finder window, go to Library: Fonts, and copy the AppleCasual.dfont folder into your Fonts folder. The next time you start up applications, Apple Casual will be available for use.

## Search for Software Updates Faster

Most people check for the latest and greatest Apple software in OS X 10.2 by clicking first on the Software Update preference pane and then on the Check Now button to see what's out there. Here's a simple time-saver for the next time you want to find new and updated apps—hold down the option key while clicking on the Software Update panel, and the Check Now process will begin. Panther users, you've got two even simpler methods of checking for software updates. You can either use the Software Update menu option under the Apple menu, or you can click on the Software Update button that you see when you select About This Mac from the Apple menu.

## Play the Oldest Video Game in the Newest OS

Have a few minutes to spare for a game but not enough time to fire up Unreal Tournament 2003 or The Sims? Try a quick game of Pong, the original video game. Just open a new Terminal window and type `emacs`; this is one of the more powerful Unix text

**Hide and Seek** A simple Terminal command gives your Dock the ability to show clearly which applications are hidden—the semitransparent icons for Safari, Terminal, iChat, and so on indicate those applications' hidden status.



## UNIX TIP OF THE MONTH

If you use the Personal File Sharing feature in the Sharing preference pane, you may wonder how you can tell who's accessing your machine. The Network Utility in the Applications: Utilities folder will give you detailed information on everything that's happening on your network, but its output can be hard to read unless you're well versed in the language of networking. To quickly see who's out there, type this command in Terminal: `netstat -na | grep 548`.

The command's output shows you who's connected to your machine (see “Who's There?”). The first output line displays an established connection between the host machine (IP address 192.168.1.150) and a guest machine (IP address 192.168.1.225). The last line shows a second connection from a machine with an IP address of 192.168.1.55.

If you see any IP numbers in your output that you don't recognize, it's possible that unauthorized users are using your shared folders, and you may wish to investigate further with your network's administrator or your ISP—and consider disabling Personal File Sharing until you figure out the source of the unknown connections.

```

tssh (tty4)
[demonspeed:~] robg% netstat -na | grep 548
tcp4      0      0  192.168.1.150.548    192.168.1.225.49153  ESTABLISHED
tcp4      0      0  192.168.1.150.548    192.168.1.55.49485  ESTABLISHED
tcp4      0      0  *.548                *.*                  LISTEN
[demonspeed:~] robg%

```

**Who's There?** Use the `netstat` command to see who's connected to your Mac.

## CHANGE DESKTOP PICTURES

When you want to get a new collection of desktop images, you may think that you have to select Choose Folder from the Collection pop-up menu in the Desktop preference pane, and then navigate to the folder of your choice. But it's much easier to drag a folder from the Finder into the preview area near the bottom of the Desktop preference pane. When you do that, the Collection pop-up menu will change to reflect the folder's name, and the preview area will display the images in that folder. (You can also drag an individual picture icon from within a folder to change the available collection and set the desktop picture at the same time.)

editors. When the editor opens, press the escape key and then the X key, type **pong**, and press return.

You'll find a rudimentary Pong game on your screen. There's no computer opponent, so you'll have to use the left and right arrows to control the paddle on the left, and the up and down arrows to control the paddle on the right. When you're done being amazed at how far video games have come in the last 20 years, just press control-X followed by control-C to return to the Terminal prompt—and the present day.

### Banish the Tilde from Users' Site Names

With OS X's built-in Personal Web Sharing (found in the Sharing preference pane), every user on your Mac

on. This restarts Apache, which will then read the modified configuration. From now on, you can skip the tilde and just type <http://your.ip.address/alice> to get to Alice's Web site. Repeat this process for any other user URL you'd like to modify.

### Display a File's Real Path

When you use the Find command in OS X 10.2's Finder and then select an item from the results, the item's path may not be clearly visible (see "Stay on the Path"). To see the full path, you can drag up the bar that separates the search results from the path until you have designated a large enough display space. An easier method is to double-click on the divider bar, which forces the results to display in the smallest possible space. Double-click again, and you'll see a hierarchical path display. In OS X 10.3, Apple has

fixed this problem, and the item's path will display correctly—though you can still drag up the divider bar to create the hierarchical path display. □

### Stay on the Path

As displayed in 10.2, the path to the Finder's search results is basically useless (top); a simple double-click on the divider bar, though, gives you a much more useful display (bottom).



**Go Ask Alice** Adding the first line shown in this shot allows your users to access their sites without typing a tilde in the URL.

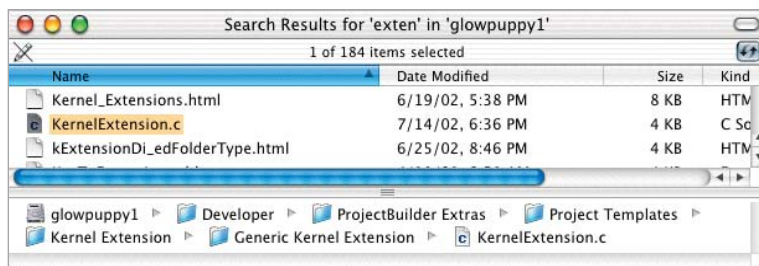
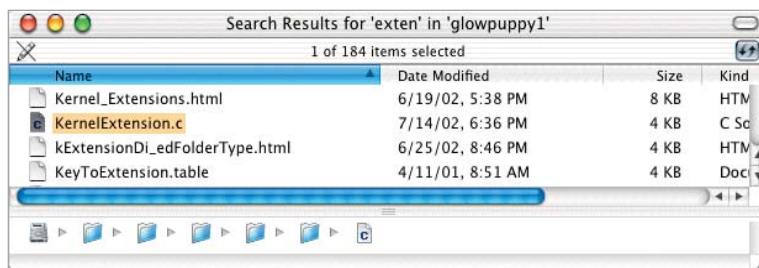
can have a personal Web site that others can access at a URL such as [http://your.ip.number/~user\\_name](http://your.ip.number/~user_name). If you don't like having the tilde in the URL, however, you can easily remove it with Terminal and an admin password.

Open a Terminal window, and then type **cd /etc/httpd/users** to switch to the directory that Apache (the built-in Web server) uses to manage the user sites. If you're unsure of your users' short names, type **ls** to see a list of the available configuration files. Say you want to modify the settings for a user named Alice: type **sudo pico alice.conf** and enter your admin password when prompted to do so. Once the file is open, type the following above the first line (the one that begins with **<Directory>**): **Alias /alice "/Users/alice/Sites"**.

This **Alias** command acts just like an alias file in the Finder—it tells Apache that someone looking for a page at the /alice URL should be sent to Alice's Sites folder instead (see "Go Ask Alice").

Once you've added the line, press control-X to exit, and then press Y when pico asks if you'd like to save the modified buffer—this will write your changes to the file.

Return to the Sharing preference pane, and turn the Personal Web Sharing feature off and then back



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# Mac OS X Hints

MAC OS X 10.3 OFFICIALLY INCLUDES MORE THAN 150 NEW features. But for every feature Apple tells you about, there are dozens more time-saving tools, little-known shortcuts, and geeky Terminal tricks hiding

beneath the surface. Ever wondered how to change OS X's default Terminal shell or transfer your Users folder to a different location? Would you like to move files and change applications more efficiently? I'll tell you how—and I'll offer plenty more useful (and a few not-so-useful, but fun) tricks to help you uncover some of Panther's best-kept secrets.

## Track Down System Preferences

If you have trouble remembering whether your QuickTime preferences are located in the Internet & Network or System sections of the System Preferences window, don't worry; you're not alone. Luckily you don't have to remember in Panther—you can now find and open preferences with the keyboard. For example, when you type Q while in the System Preferences window, the QuickTime icon lights up. Press the space bar and the QuickTime panel will open. Press E to find your Energy Saver preferences or press

E-X to find Exposé. As you add third-party preference panels, such as Microsoft's Mouse driver, you'll find that these are also accessible via the keyboard.

## Banish Bash

Apple's move to Panther has resulted in at least one big change for Unix fans: tcsh is no longer the default Terminal shell. As of OS X 10.3, Apple has switched to the bash shell. Of course, this change may not make you very happy if you've invested a lot of effort into setting up a customized tcsh environment.

There are two ways to reset tcsh as your default shell. The first is to open Terminal's Preferences and set the Execute This Command option to `/bin/tcsh`. However, this change will only apply to local Terminal sessions. If you connect remotely via SSH, you'll once again find yourself looking at the bash shell.

The preferred way of changing your shell is to use NetInfo Manager (Applications: Utilities). Launch the program, click on the padlock icon, and then enter your password. Click on the Users label at the top of the second column and select your user name from the third column. In the bottom half of the window, scroll until you can see the "shell" property and then click on its Value entry, which should read `/bin/bash`. Change this to read `/bin/tcsh` (see "Shell Games"). Press `⌘-S` to save your changes and press `⌘-Q` to quit the program.

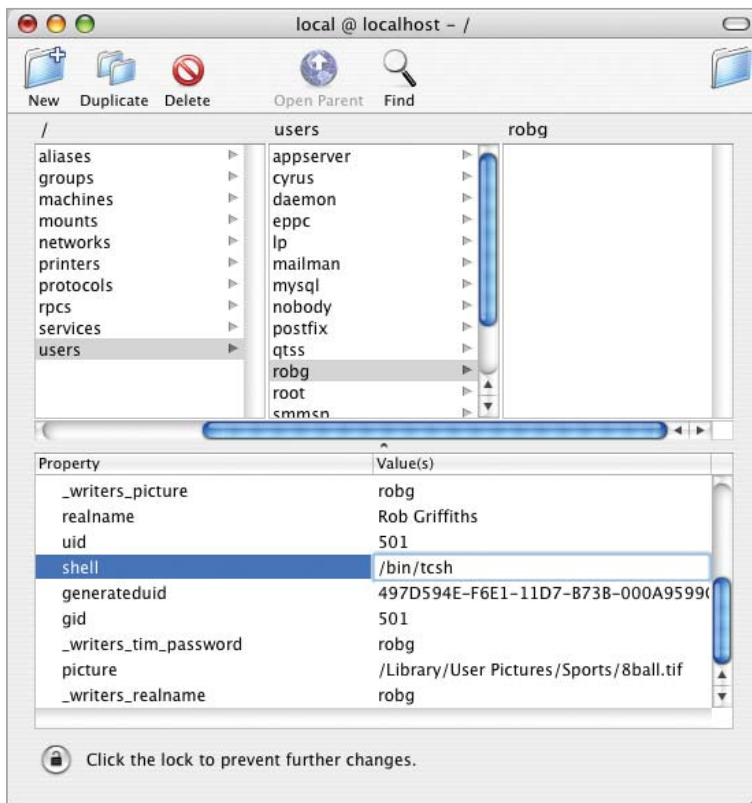
You'll need to quit and restart Terminal for the changes to take effect. Once you do, you'll see that your default Unix shell has returned to the tcsh you know so well.

## Move Desktop Files via Exposé

If you're like most Mac users, you spend a lot of time switching between multiple open windows from multiple applications—effectively hiding your desktop from view. So what do you do when you want to move a file from the desktop to another location? You do the window shuffle: dragging and hiding as necessary until you can see the source file and its destination at the same time.

With Exposé, this task has become much easier. Simply press the Exposé Desktop key (F11, by default), and click on and hold the object you want to move. With the mouse button still pressed, press the All Windows key (F9, by default) and locate a Finder

**Shell Games** Are you lost in the new bash shell? A quick trip to NetInfo Manager can banish bash for good.





window. Drag the object over the Finder window and wait until the Finder activates. You can now use spring-loaded folders and the left navigation pane to file the object anywhere on your system. And if you've set up your multibutton mouse to work with Exposé, you can do all of this with one hand (see "Exposing the Power of Exposé").

### View and Edit Word Documents

If you don't own Microsoft Office v. X but need to view and edit Word files on occasion, you'll find a built-in solution in Panther's TextEdit application. Just drag and drop Word files onto the TextEdit icon in your Dock, or choose File: Open from within TextEdit. There are some limitations, of course. TextEdit offers only basic editing capabilities. You'll also lose any special Word formatting—such as comments or marked-up text—when you save over the original document from TextEdit. Nevertheless, TextEdit's newfound abilities will come in handy if you find yourself on the road without access to Office.

### Keep the Toolbar, Lose the Sidebar

The Finder's sidebar displays all of your mounted disks and servers, and it allows you to keep favorite files and applications within reach. Those users with small screens, however, may find the loss of window real estate disturbing. You can quickly disable the sidebar by selecting Hide Toolbar from the Finder's View menu, but this also causes the toolbar to vanish. If you want the toolbar but not the sidebar, double-click on the small dot in the divider bar between the sidebar and the window area. Another double-click will restore the sidebar when you need it.

### Expand Threaded Mail Views

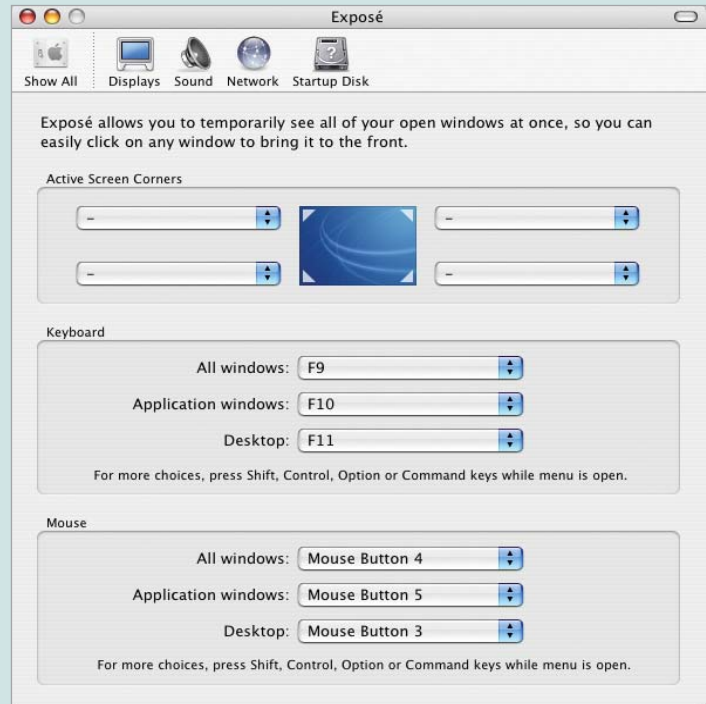
You've probably heard about Mail's new threaded view, which groups together related messages—regardless of their actual time and date stamps—in the folder you're currently working in. (To enable the threaded view, open the View menu and choose Organize By Thread.) While this is quite useful, it's only part of the picture. You're only seeing the messages you received and not the messages you sent or filed away in a different folder. To harness the full power of threading, ⌘-click on your Sent folder (or any other Mail folder). Mail will add any related items from that folder to the threaded messages in your Inbox, giving you a complete picture of the exchange. You can ⌘-click on as many additional folders as you like in order to further expand the scope of the thread.

### Replace Safari's Tabs

Have you ever wanted to replace the Web site on one of your Safari tabs? In Jaguar, there was no easy way to do this; but under Panther, it's quite simple. Just

## Exposing the Power of Exposé

Panther's new Exposé feature brings order to the chaos of window management. With a click of the mouse or the press of a function key, your open windows magically arrange themselves—or vanish entirely. But if you're still using a single-button mouse, you're missing out on much of Exposé's power. When you plug in a multibutton mouse, the Exposé panel gains an entirely new Mouse section (see "Better Exposure"). You can use this section to assign each of the Exposé settings to a different mouse button, putting the power of Exposé at your fingertips.



**Better Exposure** With a multibutton mouse installed, Exposé becomes even more powerful; the new panel at the bottom allows you to assign Exposé settings to your extra mouse buttons.

click on the URL of the Web page you want and drag it onto the tab you'd like to replace. You can open a new tab by dragging the URL into an empty area on the tab bar. (You can also accomplish this last task more quickly by ⌘-clicking on the URL.)

### Switch Applications with Ease

With Panther, OS X no longer relies on the Dock as its sole application switcher. You can now quickly move between open programs with the help of a new on-screen menu that pops up right where you need it—so no more mousing over to the Dock (see "Switcheroo"). If you like to keep your Dock hidden, you'll find this change particularly useful, as the Dock will no longer pop on screen every time you switch applications.

To open the on-screen menu, press ⌘-tab. The menu will stay open as long as you keep the ⌘ key pressed. You can move forward through the list of open applications by repeatedly pressing the tab button (⌘-shift-tab moves backward through the list). Once the switcher is open, you can also navi-

# Home away from Home: Relocating User Folders

By default, every user's Home folder is located in the Users directory at the root level of the boot volume—and user folders should generally remain there.

However, there are times when you might prefer that your user folder be located elsewhere (or, if you're an administrator, that all user folders be located elsewhere): perhaps your boot volume is running out of space; maybe you want to keep user files on a separate volume or partition to simplify backups.

Before OS X, making such a move was as easy as dragging the folder to another volume; but this technique isn't completely reliable in OS X. The Finder doesn't always copy everything perfectly (for example, it may miss invisible files). And after making the copy, you may encounter problems related to permissions—your user folder may be missing files or may have files that can't be opened. In addition, because OS X assumes that all user folders are located in the default location of the Users directory, you have to let OS X know if you've moved your Home directory.

It's possible to properly transplant your user folder by using a combination of the Finder, Terminal, and NetInfo Manager utility. But this is one time where you can do everything at once—and much more quickly—using a few commands in Terminal.

For this example, let's assume that you want to move your personal user folder to another volume. First note that, due to its Unix underpinnings, OS X doesn't support HFS Standard volumes. This means that if the destination volume is formatted using HFS Standard—common on Macs that originally shipped with Mac OS 8 and earlier—you'll have to reformat it using HFS Plus (also known as HFS Extended). To verify your hard drive's formatting, select the hard drive in the Finder and choose Get Info from the File menu. Make sure you don't have any locked folders in your user directory, as these will cause the procedure to fail.

Open Terminal and type the following two commands (each command is one line; include spaces where you see them):

```
sudo ditto -rsrc "/Users/username" "/Volumes/volumename/
Users/username"
```

and then:

```
sudo niutil -createprop / "/Users/username" home
"/Volumes/volumename/Users/username"
```

Provide your password when prompted.

In these commands, *volumename* is the name of the volume to which you

gate by moving the mouse left and right. There are also two lesser known shortcuts that provide even more power to the switcher: press H to hide the selected application and Q to quit it. Unfortunately, once you've hidden an application, you'll have to switch to the application to undo those actions.

## Stifle Your Startup Items

If the first thing you do every morning is check your e-mail or a favorite Web page, you can save time by adding your e-mail program or Web browser to your list of Startup Items. When you do, your Mac will automatically load the application when you log in, so it'll be ready to go by the time you've finished your morning coffee. (To add programs, folders, or files to your list of startup items, simply drag the icons into the Startup Items tab of the Accounts pane in System Preferences.)

Sometimes, however, you may not want your regularly scheduled programs to open at startup. Maybe you're dying to see if your spouse, boss, or senator responded to your e-mail and you just want to get to your desktop as quickly as possible, without waiting for your login items to open. Or maybe you've recently installed a program that you suspect might be causing problems. In these cases, you can stifle login items by holding down the shift key after entering your user name and password at the login screen. You'll arrive at the desktop, with all applications closed and ready for your command.

**Switcheroo** Apple's new application switcher displays all running applications in this eye-catching icon bar. While switching, you can also use the H and Q keys to hide or quit, respectively, the highlighted application.



## Add Text to the Login Screen

In case you've been lying awake at night wondering how to add a line of customized text to your login window, help is at hand. Maybe you work somewhere that requires a disclaimer on the usage of computing resources; or maybe you want to add a personal touch to your login window—a daily reminder to floss, for example.

To add a line of text to your login screen, you'll have to edit a preference file. At the root of your hard drive, open your Library's Preferences folder. Inside you'll find a file called com.apple.loginwindow.plist. To edit it, drag its icon onto the TextEdit icon (located in your Applications folder).

Look for the first `<dict>` tag in the file and insert these two lines directly below it:

```
<key>LoginwindowText</key>
<string>Add your text here</string>
```

The text will be left-justified. If you want it to appear centered, you'll need to add spaces in front of your message. Choose File: Save. When TextEdit says it can't save the document, click on Overwrite. Your modification will appear the next time you log in.

## Customize Your Login Background

If adding a personalized message to your login screen doesn't adequately satisfy your creative urge, you can also give it a new background image.

To replace Apple's default login background with something a little more your style, choose an image you'd like to use—any JPEG or PDF file will do—then go to the Library folder at the root level of your hard drive and open the Desktop Pictures folder. You'll see a list of the standard Apple desktop images. Drag *Aqua Blue.jpg* out of the folder and stash it in a safe place (or rename it). Now drag your replacement graphic into the Desktop Pictures folder and rename it *Aqua Blue.jpg*. When you restart the Mac, the new

want to move the user folder; and `username` is the name of your user folder (which is also your short user name).

The first command (`sudo ditto`) copies your complete user folder, including all invisible files, to a new user folder on the specified volume; the `-rsrc` option ensures that all resource forks are copied. The second command (`sudo niutil`) tells OS X that your Home directory has been moved to the new location. (In fact, this Terminal command does exactly the same thing as using the NetInfo Manager utility to change the location of the property *home* for your user profile.)

Log out and then log back in to make sure your user folder was properly copied to the new volume and that your home folder was properly reasigned. If you were successful, open Terminal again and type:

```
sudo rm -dr "/Users/username/"
```

Press return and type:

```
sudo ln -s "/Volumes/volumename/Users/username"  
"/Users/username"
```

Here, the first command (`sudo rm`) deletes your original user folder while the second command (`sudo ln`) creates a symbolic link—similar to an

alias—from the main Users directory on the boot volume to your new user folder on the new volume. This will make it easier to find your personal user folder, which you'll now see in the stock Users directory on the boot volume.

If you want to use this technique to move all your user folders at once, remove `/username` from the `sudo ditto` and `sudo niutil` commands. However, you should still remove (using the `rm` command) and link (using the `ln` command) each user folder individually. Leave the main Users folder and the /Users/Shared folder alone, because some applications require you to have the Shared folder inside the Users folder on the boot volume.

Unfortunately, there's currently no reliable way to move your personal user folder to a removable volume (so that you can use the same user directory on different computers, for example). The specifics are too ugly to get into here; suffice it to say you won't be able to log in to your account without mounting the removable volume. If you try to log in without the volume, Mac OS X will prevent you from accessing your user directory on that volume again until you (or an administrator) fix a bunch of invisible files using Terminal. Apple has acknowledged this shortcoming and will hopefully add support for such functionality in the future. —DAN FRAKES

image should appear behind your login screen.

Keep in mind that this change affects *all* account holders on this Mac, not just your own account.

## Scroll Diagonally

Scroll bars are an extremely inefficient mechanism for moving diagonally through a window. Fortunately, OS X offers an alternate scrolling system for these situations. Position your mouse inside a Finder window that is set to Icon or List view. When you press ⌘-option, the cursor will turn into a little white-gloved hand, which you can use to drag—and scroll—the screen in any direction.

## Store Software Updates

Software Update is Apple's way of cleaning up after itself. Whenever Apple releases a new update or patch, a dialog box appears and offers to install the software for you.

Unfortunately, if you ever need to reinstall OS X from its original CD or DVD (when installing a new hard drive or moving to a new computer, for example), you'll have to download and install these updates again. But while you can't skip the reinstallation process, you can at least skip the download step by saving software updates to your hard drive.

When Software Update pops up on screen with new software to install, select the update(s) you want to download and then choose the Install And Keep Package option from the Update menu. Your Mac will then store the package on its hard drive. You can reinstall your downloaded updates at any time by double-clicking on each installer. (It's a good idea to back up these packages before reinstalling OS X.)

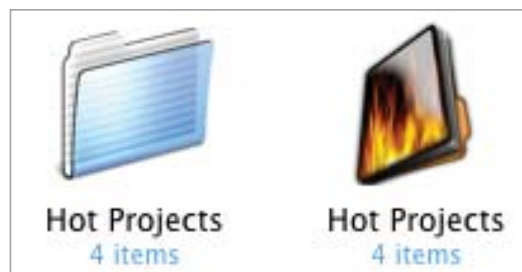
## Icons that Stand Out

Why use a boring blue folder icon for your Hot Projects folder when you could be using an icon worthy

of the truly incendiary nature of your work (see "Flaming Folders")? Mac OS X is perfectly happy to accept new icons that you draw or download yourself.

The first step to customizing a file or folder icon is to locate a set of replacement icons. If you're truly talented, you can create your own icons using your favorite graphics program or specialized icon-making software such as Mscape Software's Iconographer X (\$15; [www.mscape.com](http://www.mscape.com)).

A faster approach, however, is to head out to the Internet in search of icons to add to your collection. You'll find thousands of ready-made icons at [www.xicons.com](http://www.xicons.com) and [www.iconfactory.com](http://www.iconfactory.com).



When you have your replacement icon ready to go, click on the file in the Finder and open its Get Info window (File: Get Info). Do the same thing for your original folder icon. Arrange the windows so that you can see them both. Click once on the small icon in the *customized* icon's Get Info window, and choose Edit: Copy. Click on the small icon image in the *original* icon's Get Info window, and choose Edit: Paste. The new icon should appear in place of the standard one. Close both Get Info windows.

In addition to customizing folder icons, you can also use this technique to create custom icons for files or for your hard drive. If you change your mind about a customized icon, just open its Get Info window, click on the icon, and press delete.

## Flaming Folders

Which folder offers a clearer picture of its contents? Custom icons are a great way to personalize your machine, and they make it easier to identify a folder's purpose at a glance.

Quit the Finder

When it all comes down to it, the Finder is nothing more than a regular OS X program. It may not appear to have a Quit command, but you can indeed quit the Finder should you need a little bit more memory or computer horsepower for, say, a 3-D battle simulator.

The most obvious way is to select the Finder from the Force Quit menu. But if you do this regularly, you may find it simpler just to add a Quit item at the bottom of the Finder menu. Here's how to go about it:

Open Terminal and type `defaults write com.apple.finder QuitMenuItem -bool yes`. Press the return key and then restart the Finder. Now you can press `⌘-Q` (or choose Finder: Quit Finder) any time you want to quit the Finder. When you need the Finder back, simply click on its icon in the Dock.

Run Your Own Benchmark Test

Officially, the *openssl* program is a cryptography tool kit; but, thanks to its built-in benchmarking program, you can also use it to compare the speeds of different machines. (Unfortunately, the program doesn't take into account the differences between operating systems, so you should use it only to compare Macs run-

ning the same OS.)

Open Terminal and type *openssl speed*. Then sit back for a good, long wait. Behind the scenes, the *openssl* program is generating encrypted keys (or passwords). The specifics of what it's doing doesn't really matter; the point is that it's giving your Mac a serious workout.

After half an eternity, the program will display its results, which should look something like this:

		sign	verify	sign/s	verify/s
rsa	512 bits	0.0034s	0.0003s	296.4	3138.9
rsa	1024 bits	0.0197s	0.0011s	50.7	921.5
rsa	2048 bits	0.1306s	0.0039s	7.7	256.8
rsa	4096 bits	0.8850s	0.0140s	1.1	71.4
		sign	verify	sign/s	verify/s
dsa	512 bits	0.0032s	0.0039s	313.7	256.1
dsa	1024 bits	0.0109s	0.0126s	91.7	79.4
dsa	2048 bits	0.0373s	0.0456s	26.8	21.9

Follow the same procedure for each test machine, and then compare the results. The higher the numbers in the far-right column of each row, the faster your machine is. □



Mac OS X Hints offers tips and tricks for using hidden features in OS X. We want to hear from you! If you've got suggestions for column tips or want to tell us what you think of Mac OS X Hints, e-mail us at [macosxhints@macworld.com](mailto:macosxhints@macworld.com). For more hints, go to [www.macosxhints.com](http://www.macosxhints.com).

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